KENTUCKY ECONOMIC FORECAST

Frankfort, Kentucky
March 2001

The Governor's Office for Economic Analysis (GOEA) is responsible for analyzing the economy of the Commonwealth of Kentucky and the United States. At the heart of this endeavor is a dynamic response econometric model that forecasts the economic outlook for Kentucky.

GOEA will release forecasts of the Kentucky economy every quarter in the first month of each quarter.

Just as the economic outlook detailed in this report helps the Finance and Administration Cabinet in planning for the future, we hope it serves a similar purpose to a broader audience.

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REALITY INTRUDES

For about a decade we have enjoyed an unprecedented expansion. Last year gross domestic output growth averaged 5.0 percent and the unemployment rate slid down to about 4 percent. Inflation was under control and consumer confidence was the highest in history. This seeming defiance of conventional economic wisdom—growth without inflation—was christened the "New Economy". And then, in December, the old economy intruded.

The intrusion of the old economy is not at the expense of the New Economy, but is more a correction, and the addition of reality to the heady growth of the 1990s. Most analysts had felt that assets, especially those related to the New Economy, had been strongly overvalued by the stock market. The high valuation was not supported by the prospect of profits in the near future. Consumers had leveraged this newfound wealth into their purchasing decisions. As consumer demand soared, businesses invested in new plants and machinery further strengthening the economy. Such a build-up is normal in an expanding economy—as long as asset valuation is based on some rational expectation of future profit. It became apparent about a year ago that this wasn't the case. Much of the wealth generated by the dot-com ventures was lost as the NASDAQ underwent a correction.

The current outlook for the economy calls for a growth in real output of 2.1 percent for 2001. The growth rate is more in line with the long-term sustainable rates normally associated with GDP, and is a far cry from the 8.3 percent growth of the final quarter in 1999. The manufacturing sector will be affected the most as consumers delay the purchase of durable goods. For Kentucky the slowdown means that our heavy reliance on manufacturing employment and earnings will cause us to have just a 3.9 percent growth in personal income during 2001, compared to 4.7 percent nationally.

The positive result of this "soft landing" is that the dot-com shakeout and the stock market correction were needed to avoid a full-blown recession. The lower employment growth will, of course, affect the state economy and the tax base, but lower employment means potential inflation from high energy costs will ease.

Standard and Poor's DRI has speculated that " in the same way that Depression-era Americans became habitual savers, boom-time Americans have gotten used to spending." This spending habit will manifest itself by the third quarter of 2001, and retail sales are expected to pick up by then. The proposed Bush tax cut will not help us out of the doldrums. If things go according to the plan being discussed in the U.S. Congress, by the end of this year less than one-third of Kentucky households will get an additional $20 to spend. That's unlikely to have much economic impact. (In 1997 when the recession in Japan was at its worst the government decided to give the equivalent of $20 per head so the Japanese could spend their way out of the it. Five years later Japan is still in a recession.)

OUTPUT

Real GDP, the output of goods and services produced by labor and property in the United States, is forecast to grow by 2.1 percent during this year and then jump to 4.0 percent in 2002. In real terms (that means inflation has been factored out) during the current year real GDP is expected to increase by $193 billion, compared to the dramatic $445 billion increase last year. This deceleration of output is what has been worrying the financial markets, and also those in some vulnerable sectors of the labor market. The last time real GDP grew by a similar amount was in 1995 when there was a perceptible slowdown in the economy.

About two-thirds of the total economic output is dependent on consumer demand. The current expansion has been almost totally driven by consumers. Over the last five years the annual average increase in national consumption has been 4.4 percent. Even though equivalent figures for Kentucky are unavailable, a good proxy for consumption is the strength in sales tax. During the last five years the average annual growth in sales tax has been 5.3 percent. This is exactly equal to the growth in the national personal consumption expenditure for both 1999 and 2000. However, in late November the economy came to a turning point. Retail sales in the traditionally strong weekend following Thanksgiving were disappointing. Sales slipped to 5.1 percent for the last quarter of 2000 compared to 9.8 percent a year ago.

Overall real consumption (i.e., adjusted for inflation) is expected to grow by 3.1 percent in 2001 and then pick up to 4.1 percent the following year. Durable goods consumption had been growing by near double digits over the last three years, but is expected to be nearly flat at 0.8 percent this year, followed by a strong recovery to 7.1 percent in 2002. The strong showing in the following year is expected to come from computers and software. Consumers are expected to forego the purchase of electronics this year as they wait for the economy to find a firm footing, but are then predicted to return to stock up on gadgets.

Motor vehicles and parts are one of the key areas of consumer durables. Nationally this sector grew at 5.3 percent in 2000, but had slowed to just 1.9 percent[1] in Kentucky. (This bolsters the contention that the slowdown is making a greater impact in states like Kentucky with a disproportionate stake in manufacturing.) The growth for the last two years occurred primarily due to the steep discounts offered by automakers to counter the steep rise in gas prices. However, news of layoffs in manufacturing, a jittery technology sector and high gas prices has cooled auto purchases especially in the high-dollar SUV market. Even heavy discounts from beleaguered automakers like Daimler Chrysler are unlikely to increase consumption. During 2001 consumption is slated to decline by 3.2 percent, and then growth is forecasted to increase by 4.7 percent in 2002.

Consumption of nondurable goods is also expected to slide, but not as much as that for durables. From a growth rate of 5.0 percent in 2000 it is forecasted to grow by 2.8 percent in 2001 and then strengthen to 3.9 percent in 2002. Even the service sector will feel the impact of the slowdown as growth slips from 4.5 percent in 2000 to 3.7 percent for both 2001 and 2002.

Investments constitute about one-fifth of total output. Changes in investment show how businesses view the current economy. In an expanding economy business investment typically rises to meet anticipated demand. Over the last ten years investment has grown strongly by over 10 percent annually. However, for the current year investment is expected to drop by 0.2 percent and increase by 6.0 percent in 2002. Businesses, unlike consumers, are forecasted to keep investing in computers and software with projected growth of 19.2 percent. However, investment in new plants and other equipment will slacken off.

INCOME

Personal income is the broadest measure of a state's economic performance. It is a measure of the total money income of households. It is an important indicator of the economic well-being of Kentucky residents. Between 1990 and 2000 Kentucky's annual personal income growth averaged 5.4 percent—exactly the same as the national average. In 2001 personal income in Kentucky is expected to increase by just 3.9 percent to $100.7 billion compared to growth of 4.7 percent nationally. The following year the state and national growth will be about the same: 4.8 percent for Kentucky and 4.9 percent for the U.S.

The relative slide in Kentucky's personal income stems from our reliance on the manufacturing sector. In 1990 manufacturing accounted for 22.3 percent of the total earnings in Kentucky compared to the national average of 19.0 percent. As the state economy diversified, combined earnings from finance and services increased from 24.1 percent in 1990 to 28.0 percent in 2000. At the same time, during the era of the New Economy, the contribution of manufacturing dropped. Compared to the national economy the state lost ground in the service sector (the concentration ratio dropped from 75 to 73) and gained substantial grounds in manufacturing (concentration increased from 118 to 128).

By most measures the current slowdown will impact on the manufacturing sector the most as the industrial production index slips from a growth of 5.9 percent in 2000 to just 0.1 percent in 2001 and then strengthens to 3.8 percent in 2002. The loss of earnings from manufacturing is expected to depress Kentucky's personal income growth for much of 2001.

Per capita income in Kentucky will continue to hover around 81 percent of the national average during the next two years. At the beginning of the current expansion, in early 1991, Kentucky's per capita income was 80.8 percent of the national average and grew at a promising rate as the state outperformed the nation for several years. By 1998, however, as economies in the northeast and California raced forward the national average increased, pushing the state per capita income ratio back to 81 percent.

Consumer Confidence and Spending

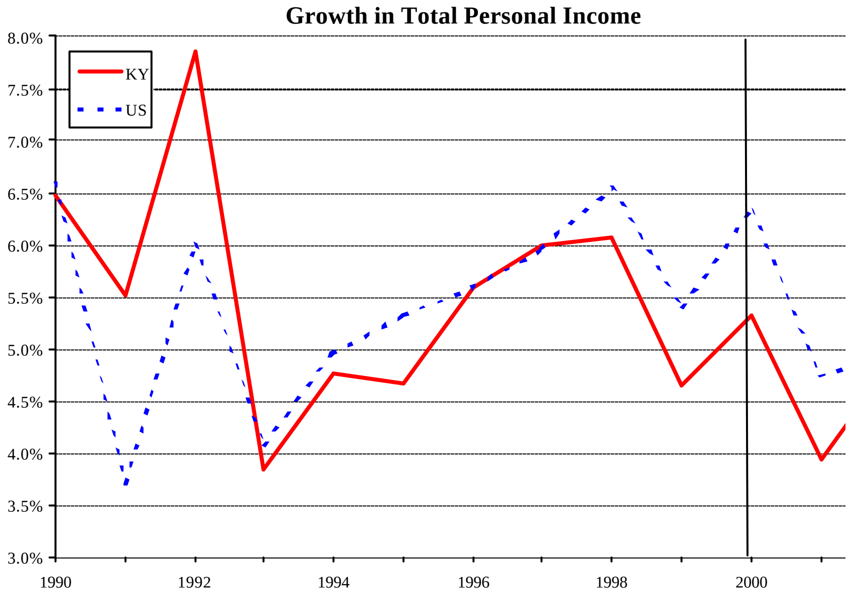
Though the average per capita income is lower than the national average, it is assumed that the consumption pattern in Kentucky is similar to the national average. At the broadest level it means that consumer spending rates exceed income. In 2000 real consumer spending increased by 5.3 percent, but real disposable income (i.e., adjusted for inflation and taxes) grew by only 2.9 percent. This tendency to spend faster than earnings is not expected to change even during the slowdown. However, since income will be reduced, expenditures are forecasted to be less than during the boom times. Retail sales were up 7.9 percent in 2000, but are expected to increase by just 1.9 percent in 2001 and then bounce back to 4.6 percent.

The proclivity to spend even during a slowdown is what is expected to keep the economy from experiencing a severe downturn. Last year the University of Michigan consumer sentiment index reached its highest annual level ever at 107.6. During the last few months the index has fallen for three consecutive months, seeming to indicate a recession. The survey indicates that 40 percent of consumers expect the economy to worsen during the rest of 2001, and nearly half think that unemployment will increase in the year ahead, the highest proportion since the recession in the early 1990s. But in gauging their personal finances the view was quite different. In January 46 percent reported their financial condition had improved, and 37 percent expected further improvement later in the year. These interviews were conducted before the Fed's second rate cut in late January and, of course, before the 50 basis point cut in March. The bottom line is that consumers are cautious, but not pessimistic. This was demonstrated in January and February when store sales improved due to discounts and better weather. Sales tax re-

Proportion of Earnings Derived from Manufacturing and Services

	1990			2000		
Sector	**KY**	**US**	**Concentration Ratio**	**KY**	**US**	**Concentration Ratio**
Manufacturing	22.3%	19.0%	118	20.2%	15.8%	128
Finance and Services	24.1%	32.3%	75	28.0%	38.2%	73

Note: The concentration ratio measures the relative importance of an industry in the state to the same industry nationally. It is the ratio of the percent of earnings derived from a particular sector in Kentucky to the percent of earnings derived from the same sector nationally.



offsets the price increase from the energy market. Overall inflation is forecasted to be 2.4 percent in 2001 and drop further to 1.8 percent in 2002. This is a fortunate turn of affairs, because increasing inflation would have taken away the Fed's incentive to lower the federal funds rate to perk up the economy.

ceipts in Kentucky grew by 3.7 percent[2] for the combined months of January and February, compared to the more vigorous 5.1 percent growth a year ago.

INFLATION and EMPLOYMENT

How the Slowdown Tames Inflation

In spite of the tight labor market, inflation had never been a problem in this era of the New Economy. Last year inflation breached the 3 percent mark as energy prices soared. Core inflation remained at 2.4 percent, though the CPI for energy shot to 16.9 percent. Crude oil prices aren't expected to return to the $11 per barrel or even twice that amount in the near future. Low utility costs in Kentucky do not make us immune to the volatile electric and natural gas prices in California and the northeast. The higher prices will work their way into cost of goods and then indirectly impact consumers in Kentucky. So are we in for an era of accelerating inflation?

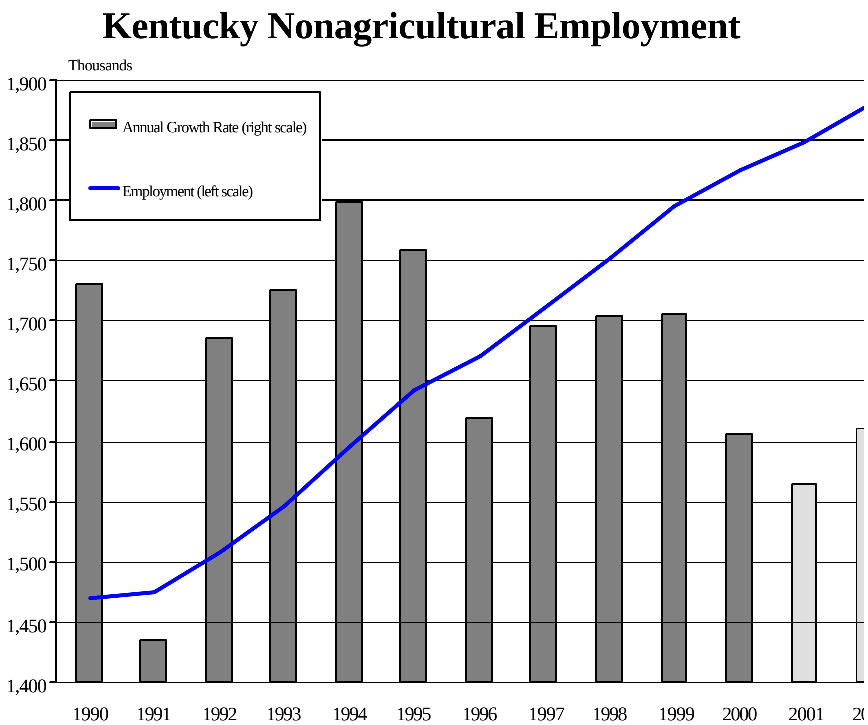
No. Our savior is the recession in manufacturing and weak growth elsewhere in the economy. The slowdown will curb demand and job growth. As unemployment increases, wages will grow more slowly, productivity remains high (remember the computers and software businesses bought) and

EMPLOYMENT

Looking at the aggregate employment numbers it is difficult to see why Kentucky should worry about a slowdown, or even whether a manufacturing recession is taking place. In 2000 we added almost 30,000 new jobs as nonagricultural employment grew by 1.6 percent. The unemployment rate has held steady at 4.1 percent throughout the year. The civilian labor force has grown steadily too, as more and more people enter the job market.

A closer scrutiny reveals that on an annual basis Kentucky gained 48,700 jobs in the first quarter of 2000, but by the final quarter only 19,500 new jobs were created. A similar slide took place in 1995 as the Kentucky economy was buffeted briefly by a general drop in demand that led to a slowdown. During this period much of the loss was concentrated in textile and apparel as those industries relocated to take advantage of lower-wages abroad. This time around the loss is in the high-wage manufacturing durables sector. By most accounts the manufacturing sector is in a recession. In 2000 the average worker in the durable goods sector had weekly earnings of $672 compared to $549 for nondurable goods. This difference in wages substantially increases the impact of the current job losses compared to the slowdown in 1995.

The slowdown will be a blip to the overall labor market, but will be concentrated in the manufacturing sector. Payroll employment is forecasted to increase by 1.3 percent this year with the addi-



the last decade in response to both economic development incentives and from the availability of raw materials. However, competition from neighboring states and Canada has reduced the growth potential for this sector. The expected decline in employment of the transportation equipment industries, mainly motor vehicles and parts, is not related to competition, but demand. In spite of the drop in interest rates, particularly in the last few months, the automobile market will remain soft. Both high gasoline prices and the broad-level drop in asset values from the shake-out in the stock market tends to lower demand for automobiles and light trucks. The drop in employment in this

tion of 24,000 new jobs, and then accelerate to 1.7 percent with 31,200 more jobs. Manufacturing will tumble during this year with a net loss of 10,400 jobs or a drop of 3.2 percent. The following year manufacturing employment is expected to grow by 0.5 percent as consumer confidence bounces back and the economy recovers from its brush with normal "old economy" growth rates.

Much of the loss is anticipated to occur in the lumber and furniture industry as well as in transportation equipment. The combined employment in the lumber and wood products industries, and furniture and fixtures is 22,000 or about 7 percent of total manufacturing employment in Kentucky. These two industries grew rapidly during

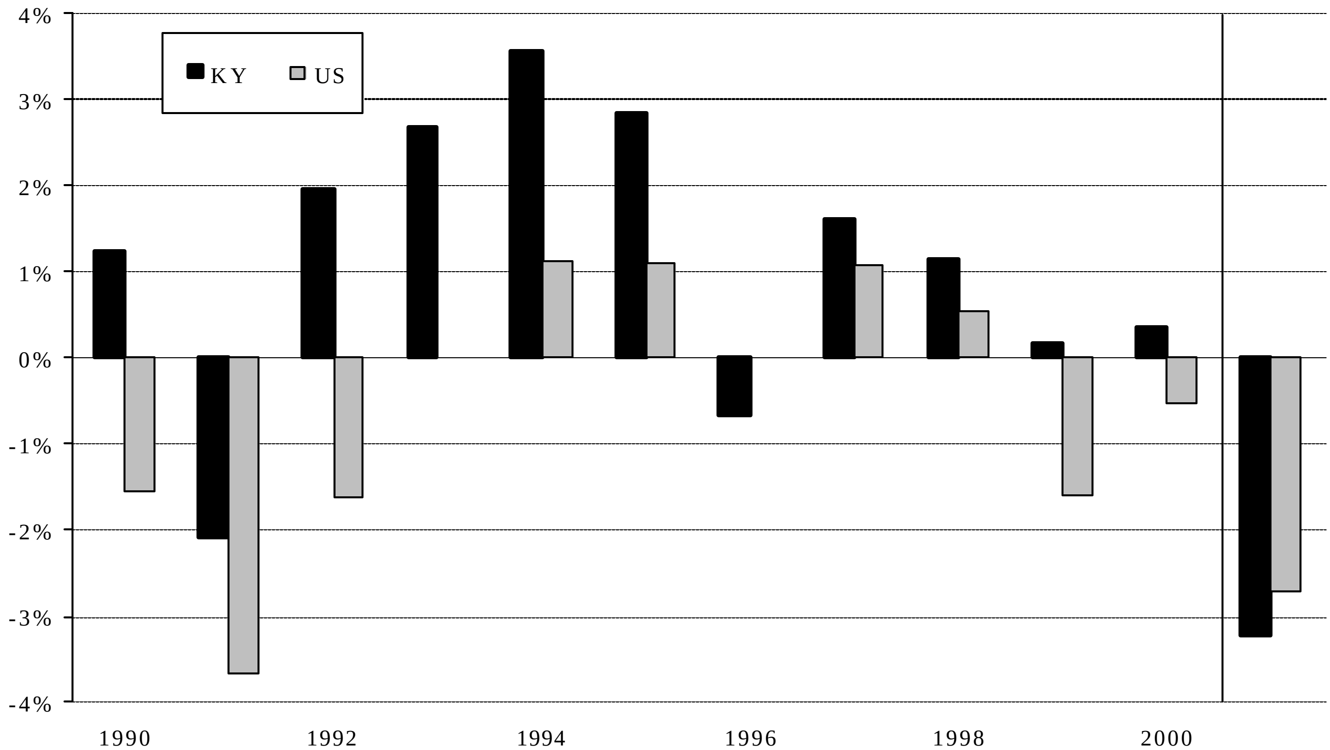
sector is estimated to be about 4 percent, in sharp contrast to the annual average gain of 8.7 percent during the current expansion.

The bad news in the manufacturing sector is balanced by the continuing growth in the service sector and the sudden, but short-lived, gain in mining. Last year mining employment in Kentucky dropped precipitously by 8.8 percent even as crude oil prices increased. That's because natural gas, and not crude oil, is the closest substitute for coal. With natural gas prices rising the spot price of coal also increased and mining activity picked up. These jobs are expected to disappear by the end of 2001. By then, however, manufacturing jobs should start making a comeback as the Kentucky economy recovers.

1 Motor vehicle usage tax for calendar years 1999 and 2000 was used as Kentucky proxy for vehicle purchase.

2 The data was first adjusted by excluding two taxes that were not in the tax base a year ago.

Growth in Manufacturing Employment



Employment in Kentucky
CONTROL Scenario: February 2001

	1998	1999	2000	2001	2002
Thousands of Persons					
Total Nonagricultural	1,752.7	1,795.4	1,824.9	1,849.0	1,880.2
Contract Construction	83.6	86.5	87.4	87.4	87.4
Mining	22.9	21.5	19.6	20.0	19.4
Manufacturing	320.3	320.8	321.9	311.5	313.2
Nondurable Goods	132.5	127.6	125.9	124.7	123.5
Durable Goods	187.8	193.2	196.0	186.8	189.7
Transportation & Public Utilities	102.1	105.1	108.7	111.9	113.9
Trade	416.8	427.1	430.4	442.8	446.3
Finance/Insurance/Real Estate	69.7	70.7	76.6	72.5	73.5
Services	442.6	462.7	471.8	494.6	516.8
Total Government	294.7	301.2	308.7	308.3	309.8
Federal Government	37.1	37.0	39.2	38.0	38.9
State & Local Government	257.6	264.5	268.7	270.3	270.8
Annual Percentage Change					
Total Nonagricultural	2.4	2.4	1.6	1.3	1.7
Contract Construction	2.1	3.5	1.0	0.0	0.0
Mining	-1.1	-6.1	-8.8	2.2	-3.3
Manufacturing	1.1	0.2	0.3	-3.2	0.5
Nondurable Goods	-2.2	-3.7	-1.3	-0.9	-1.0
Durable Goods	3.6	2.9	1.4	-4.7	1.6
Transportation & Public Utilities	5.2	2.9	3.4	3.0	1.9
Trade	1.8	2.5	0.8	2.9	0.8
Finance/Insurance/Real Estate	0.8	1.3	8.4	-5.3	1.3
Services	4.6	4.5	2.0	4.8	4.5
Total Government	1.3	2.2	2.5	-0.1	0.5
Federal Government	-2.5	-0.2	5.9	-3.0	2.3
State & Local Government	1.8	2.7	1.6	0.6	0.2

Selected U.S. and Kentucky Economic Indicators
CONTROL Scenario: February 2001

	1998	1999	2000	2001	2002
US Real GDP (Bil 92$)	8,516	8,876	9,320	9,513	9,897
% chg	4.4	4.2	5.0	2.1	4.0
KY Personal Income (Mil$)	87,946	92,037	96,926	100,746	105,626
% chg	6.1	4.7	5.3	3.9	4.8
KY Per Capita Personal Income ($)	22,452	23,348	24,433	25,250	26,314
% of U.S. Per Capita Income	82.3	81.9	81.3	81.0	81.1
US Personal Income (Bil$)	7,391	7,790	8,282	8,674	9,102
% chg	6.5	5.4	6.3	4.7	4.9
US Per Capita Personal Income ($)	27,292	28,508	30,040	31,181	32,428
KY Nonagricultural Emp (Thous)	1,752.7	1,795.4	1,824.9	1,849.0	1,880.2
% chg	2.4	2.4	1.6	1.3	1.7
US Nonagricultural Emp (Mil)	125.8	128.8	131.4	132.3	133.2
% chg	2.6	2.3	2.0	0.7	0.6
KY Manufacturing Employment (Thou)	320.3	320.8	321.9	311.5	313.2
% chg	1.1	0.2	0.3	-3.2	0.5
US Manufacturing Employment (Mil)	18.8	18.5	18.4	17.9	17.2
% chg	0.7	-1.4	-0.5	-3.1	-3.6
Industrial Production Index, Mfg (%)	5.5	4.8	5.9	0.1	3.9
Industrial Production Index, Durables (%)	9.1	8.2	9.9	0.4	3.8
CPI, Rate of Inflation (%)	1.6	2.2	3.4	2.4	1.8
3-month Treasury Bill Rate (%)	4.8	4.6	5.8	4.4	4.4
Oil Price, average composite ($/barrel)	12.58	17.42	28.36	26.57	24.75

MAK: Macromodel of Kentucky
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